

## REMARKS

Claims 1, 2, 4-8, 13, 16, 21 and 22 have been cancelled.

Dependent claim 3, 10, 11, 17-20, and 22 were indicated to be allowable but they depended from rejected independent claims. Accordingly, these dependent claims have been amended to depend from one or more of the newly added claims except that allowed claim 22 has been cancelled because it is duplicative of another allowed claim.

Independent claim 14 and its dependent claim, 15, have been allowed.

Claim 12 was not acted on, even though reference was made to it in relation to the Kobayashi reference.

Newly presented claims 24, 25 and 26 are added and their entry into the case is requested.

This leaves the subject matter of claims 2, 9, 12 and the newly added claims 24, cancelled. 25, and 26 as issues to be addressed in this response.

Substantively cancelled claims 1 and 2 have been rewritten as new claim 24 that includes all of the limitations of the original claims 1 and 2. Claim 2 was rejected under section 103 as being unpatentable over Kobayashi in view of Althuber. That rejection is traversed and reconsideration is requested. First, Kobayashi does not show a connection between the coil 2 and a "speaker." Instead, Kobayashi discloses a piezo-electric crystal 1 in parallel with the coil 2. The examiner states that Althuber shows a coil in series connection with a speaker coil and it would have been obvious to substitute Althuber's series connection for Kobayashi's parallel connection. However, such a conclusion is over simplistic and electrically implausible. A parallel connection is quite different than a series connection with significant electrical differences. Kobayashi's parallel connection of the piezo-electric crystal and the coil 2 results in less current through the coil 2 than would be expected with a series connection, resulting in an electromagnetic field of less intensity than with a series connection. Applicants' series connection between the coupler coil and the speaker coil results in a greater electromagnetic field developed by the coupler

coil and stronger coupling of the signal. Furthermore, connecting Kobayashi's high resistance piezo-electric crystal in series with his coil 2 would drastically change the characteristics and operation of Kobayashi's circuit and would not produce the circuit now defined by claim 24 with the characteristics described in Applicants' specification. The text of paragraph 0070 of Applicants' specification states specifically that maintaining a low resistance in the circuit enables it to be powered by the electrical telephone circuit. Connecting Kobayashi's piezo-electric crystal in series with his coil 2 would totally defeat the Applicants' defined objective of producing a device that can be powered by the available electrical telephone circuit, as described in Applicants' specification. Accordingly, it would not be obvious to merely make the connections in series, as is done in Althuber with two coils that are each relatively low in electrical resistance. Withdrawal of the § 103 rejection that was made to claim 2 and the allowance of newly added claim 24 is respectfully requested.


Claim 9 stands rejected under §102 as anticipated by Kobayashi. That rejection is traversed. With all due respect, none of the drawings of Kobayashi show a coil made with rectangular wire. While the coil bobbin 7 of Kobayashi is U shaped that does not mean that the coiled wire within the bobbin 7 is rectangular. There is no indication whatever in the Kobayashi disclosure that the wire of coil 2 is rectangular and accordingly, the § 102 rejection is in error.

Claim 12 was not among the rejected claims, even though it is commented on in the same paragraph as rejected claim No. 9. With respect to claim 12, the Kobayashi patent does not show a carrier disc. The examiner refers to element 7 of Kobayashi as a carrier disc however Kobayashi refers to that element as a coil bobbin. Furthermore, the annular bobbin 7 could not be considered a disc because it is not a disc. Reconsideration of claims 9 and 12 is requested.

The newly added claims 24, 25 and 26 are believed to be allowable for the reasons already argued above for the rejected claims and favorable consideration of those claims is respectfully requested.

Respectfully submitted,  
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